April 22, 2020

The Honorable Chair and Members of
the Hawai'i Public Utilities Commission
465 South King Street, #103
Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Docket No. 2019-0323
Instituting a Proceeding to Investigate Distributed Energy Resource Policies
Hawaiian Electric's Response to April 3, 2020 Letter from Distributed Energy Resources Council, Hawaii PV Coalition and Hawaii Solar Energy Association

On March 24, 2020, the Commission issued a statement acknowledging the gravity of the COVID-19 outbreak and making clear the Commission's commitment to ensure reliable and affordable essential services, achieve Hawaii's clean energy and climate goals, and enable the energy sector to support Hawaii's economic recovery from this crisis. Therein, the Commission called for new proposals that can promote recovery while helping "residents and businesses better manage their utility bills in this emergency" and "support and expand clean energy job opportunities[.]" In response, Distributed Energy Resources Council, Hawaii PV Coalition, and Hawaii Solar Energy Association (collectively, the "DER Parties") submitted certain proposals in a letter filed in this proceeding on April 3, 2020. This letter responds to: (1) the proposals recommended to the Commission in the DER Parties' letter, and (2) the Commission's call for new proposals to help Hawaiian Electric's[1] customers in these difficult times.

At the outset, the Company addresses the Commission's first stated area of priority--namely, "Ensure Reliable and Affordable Essential Services." The Company agrees that it is critical that the Company "keep the lights on" as an essential service for all of its customers. Consistent with this commitment and the Commission's March 24th statement, the Company has changed its disconnection policies to ensure no customer goes without power during these difficult times.[2] The safety and reliability of the Company's services is of the utmost importance when so many customers are relying on daily delivery of electricity to keep their families safe

[1] "Hawaiian Electric" or the "Company" collectively refers to Hawaiian Electric Company, Inc., Hawai'i Electric Light Company, Inc. and Maui Electric Company, Limited. On December 20, 2019, the State of Hawai'i Department of Commerce and Consumer Affairs ("DCCA") approved Hawaiian Electric Company, Inc., Hawai'i Electric Light Company, Inc. and Maui Electric Company, Limited's application to do business under the trade name "Hawaiian Electric" for the period from December 20, 2019 to December 19, 2024. See Certificate of Registration No. 4235929, filed December 20, 2019 in the Business Registration Division of the DCCA.

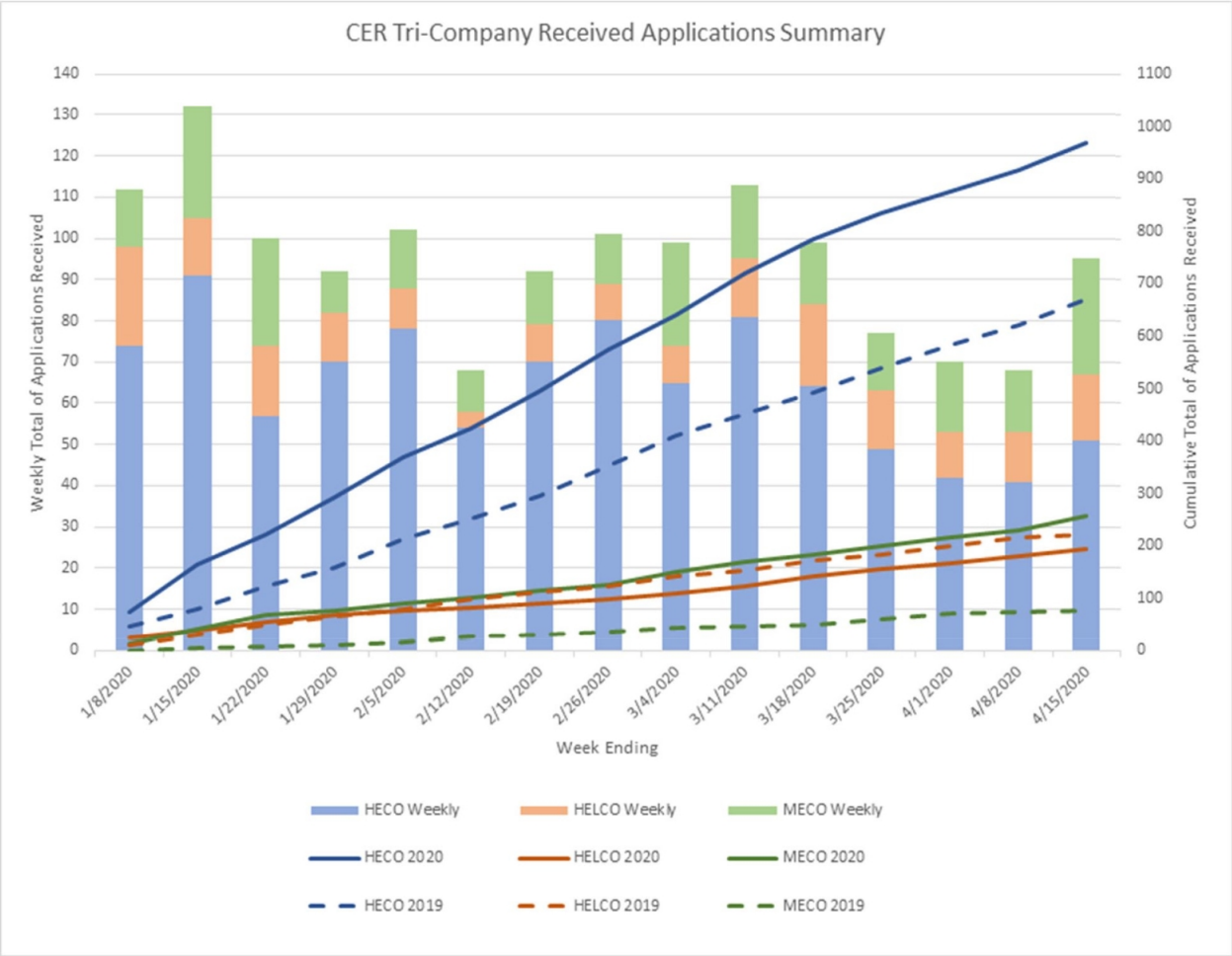
[2] On March 17, 2020, the Company suspended service disconnections for both residential and business customers for at least 30 days, and has since extended that suspension to May 17, 2020.

and provide some modicum of normalcy while they shelter in place during these uncertain times. The need for safe and reliable electric services is no more acute than for hospitals and first responders whose employees are working to keep the community safe and, in some cases, treating patients who have tested positive for COVID-19.

At the same time, the Company must keep its own employees safe so that it can meet this challenge. Hawaiian Electric is not immune to the impacts of the current COVID-19 pandemic, as many of its employees are working from home or staggering work hours and work days, leading to resource constraints. Just like its customers, Hawaiian Electric must prioritize critical and essential work, while continuing to focus on affordability for all customers during (and following) this crisis.

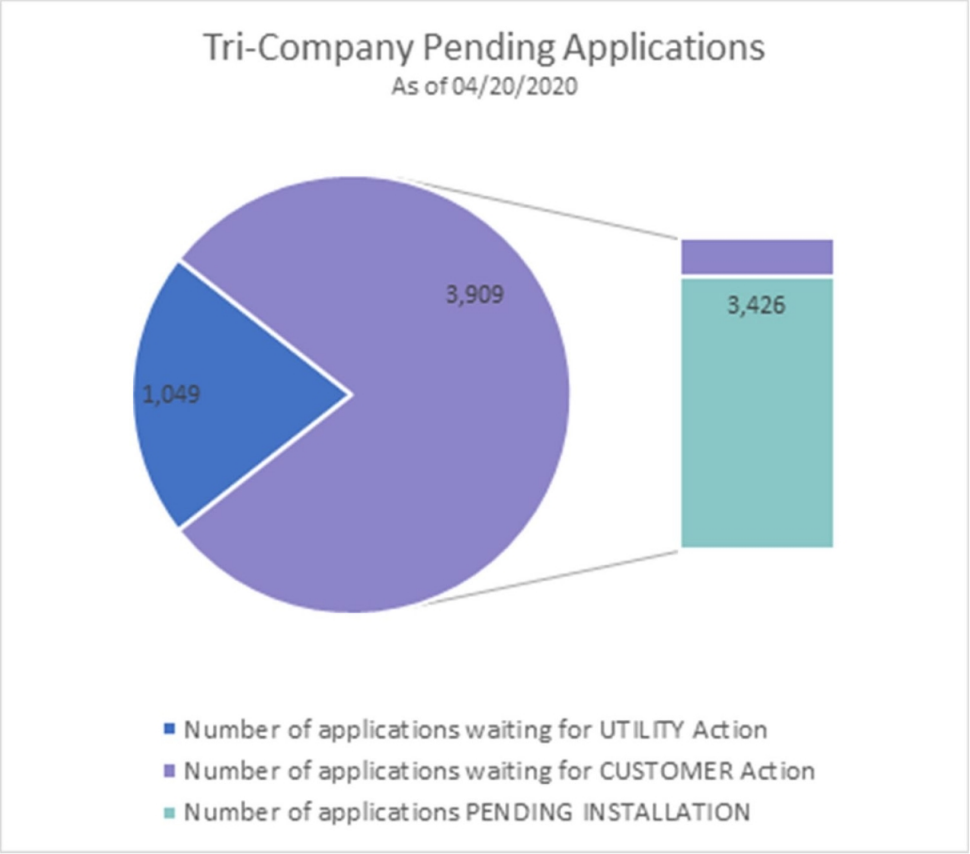
Despite these many challenges, the Company is committed to keeping the interconnection process moving as smoothly as possible for its customers, as evidenced by the following actions taken by the Company to date:

- The Company continues to review applications remotely through the Customer Interconnection Tool (CIT), allowing customers and contractors to continue to utilize this online tool to submit the relevant information and documents towards the completion of their application for the Company's DER programs.
- The Company has softened deadlines for contractors to complete installations. Specifically, contractors have been informed that the Company will work with them if they have any installation requirements they are having difficulty completing.
- The Company is continuing to perform Witness Verification Tests on larger DER systems as needed, while taking the appropriate safety precautions, such as wearing masks and practicing social distancing.
- The Company is closely monitoring application volumes, pulling weekly metrics to track trends and better understand the impacts of COVID-19 on customers and the market. The following graph shows the latest data on application submissions as of April 16, 2020.



Through discussions with members of the solar industry, the Company understands that contractors are continuing to work as an essential service and building inspections continue to be performed. If such practices persist, installations should not be significantly impacted in the near term, as most large solar contractors are fully booked until May 2020. The Company also understands that sales of rooftop solar is more challenging because salespeople are working from home. However, based on the data shown above, the Company has not yet seen any dramatic decreases in application volumes since Governor Ige's "shelter in home" announcement became effective on March 25, 2020. In fact, in the last week covering April 8, 2020 to April 15, 2020, there was an increase of 27 applications from the week prior (April 1, 2020 –April 8, 2020), and an increase of 18 applications from the week immediately following the effective date of the "shelter in home" announcement (March 25, 2020 – April 1, 2020). Between January 1, 2020 and April 15, 2020, the Company received 1420 applications, which was an increase of 474 applications compared to the same date range for 2019. Between March 5 to April 15 in 2020, the Company saw a 40% increase in applications compared to the same six-week period in 2019.

As another point of reference for the Commission's and Parties' information, the following chart shows a snapshot of applications that are currently in queue, and the amount waiting for utility action versus customer action, with the majority of applications (~79%) in the latter category.



As illustrated above, although actions on the Hawaiian Electric side represent only a small portion of all applications in process, Hawaiian Electric has taken seriously the Commission's March 24th statement and the DER Parties' letter, and has looked for further ways to reduce the time in which applications are waiting for utility action.

Regarding the DER Parties' proposals, during these very difficult times where prioritization is essential, the proposals generally do not consider the Company's primary obligation to provide safe and reliable service to all customers, the Company's own resource constraints due to the current COVID-19 pandemic, and the fact that the Company does not control every aspect of the interconnection process. The Company responds more specifically to each of the DER Parties' proposals below:

1. **DER Parties' Proposal:** Allow customers with volt-var and volt-watt turned on to activate systems 25kW or smaller upon installation. The Company supports the interconnection of systems that have both volt-var and volt-watt activated. In fact, since 2017, the Company has sought agreement from the solar parties to use volt-var and volt-watt as mitigation measures to reduce PV system impacts to the grid and streamline the interconnection process. To address concerns about impact to real power generation, using the Company's own funds, the Company actively studied and piloted the combination of these functions in partnership with the National Renewable Energy Laboratory. All studies and analysis, supported by field measurements from the current Advanced Inverter Business Process Improvement participants, conclude that this combination of settings (with the deactivation of Fixed Power Factor) is the preferred voltage mitigation strategy that benefits energy production for customers while safely and effectively addressing voltage management for the grid. Given this proposal by the DER Parties, the Company welcomes the DER Parties to similarly show support and sign a stipulation that the Company will soon be releasing to the DER Parties that requests the Commission to approve blanket activation of volt-watt to aid in the technical review steps of an application.[3]

   That said, accepting the DER Parties' proposal would essentially allow a customer to activate their system prior to any checks by the Building Department and the Company that the system was installed correctly. If, for example, installations are unsafe, not done in accordance with County building code requirements or not following design submittals relied upon for the interconnection review, safety could be compromised and put at risk the Company's customers and employees. Also, history and experience has proven that it is very difficult to incentivize contractors and customers to comply with requirements after-the-fact. Thus, if the Company identifies non-compliance after the customer's system is installed and activated, there would be little to no motivation for the contractor (who may have been fully paid at that point) and the customer to bring the system into compliance. In the past, where contractors are no longer in business, other solar contractors who are still available to support customers with non-compliant systems by stepping in to address the remediation of deficiencies, have shown a reluctance to assume the risk that would be created by the DER Parties' proposal. Therefore, the proposal by the DER Parties

[3] The stipulation on volt-watt will highlight many additional benefits of blanket activation of volt-watt in combination with volt-var, including the fact that these advanced inverter functions can mitigate voltage. They allow the customer to avoid paying for lengthy and costly interconnection studies and traditional upgrades. In addition, volt-watt and volt-var allow DER applications to not be held up by secondary voltage screens in the Rule 14H technical review process.

results in an asymmetrical risk caused by a situation which could have been prevented in the first place, if final checks by the Building Department and the Company were not bypassed prior to activation of the system.

2. **DER Parties' Proposal:** Complete energy service upgrades within two weeks of application. While the Company is willing to improve the speed of the interconnection steps over which it has control, this proposal would require the timely and expedited performance of various third parties over which the Company has no control. The need for service upgrades is generally determined by customers' contractors and/or County electrical inspectors. In fact, it is the customer's contractor who submits a request for a service upgrade and the customer's engineer who submits plans. For service connection steps that are for Hawaiian Electric to perform, the work often requires the Company to obtain permits and easements. As such, even if it is work that the Company performs, the Company is not in control of all aspects of the schedule. There are multiple steps in the process, including many where work is needed by the customer. The overall timeline of projects can vary and is largely dependent on the type of work that is needed.

   For the Commission's and Parties' reference and information, Attachment 1 to this document is a customer brochure that describes the general process and timeline for new service or upgrade requests on O'ahu. As illustrated in Attachment 1, many parties are involved in this process, and the timelines can last well over two weeks. The DER Parties' proposal is unrealistic and unreasonable for this reason alone. As noted on the brochure, Hawaiian Electric strongly encourages customers and their contractors to start the electrical service request early and plan accordingly to avoid delays for projects.

   In addition, the DER Parties ask that, if the upgrade is not completed within two weeks, then the customer should receive a $100 bill rebate per month that the upgrade is not complete. This proposal exemplifies the narrow focus of the DER Parties' proposals. Based on current rate design, this type of rebate could actually have the impact of increasing costs for the Company, which then flow in the form of increased rates to all customers, including those who are most adversely impacted from COVID-19 currently and in the near future. This outcome directly contravenes the letter and spirit of the Commission's March 24th announcement regarding COVID-19.

3. **DER Parties' Proposal:** Conduct meter swaps within two weeks of request. The Company's proposal to initiate meter swaps earlier in the process, as discussed below,

is intended to address the DER Parties' concerns outlined in its proposal in a more effective manner.

4. **DER Parties' Proposal:** Allow contractors to activate a second meter socket. This proposal ignores the significant risk and liability associated with the Company having to remove and handle third-party equipment. The Company has previously encountered many cases where the second meter socket was improperly built. Common errors included the socket not being energized, having incorrect voltage on either the line or load side, or having a non-Company meter installed. If contractors are allowed to activate a second meter socket and install their own meter, in the event the socket is built incorrectly, the Company would face challenges in getting the contractor to expeditiously remediate these socket errors, especially after the system is energized.

   DER Parties' Proposal: Require Hawaiian Electric to implement a six-month plan to rapidly expand the interconnection process. The Company notes that rapid expansion of the interconnection process would require the Company to expend resources that are not currently funded. In this time in particular, the Company is keenly focused on keeping costs down and operating more efficiently. The Company suggests that longer term actions such as this proposal to change the interconnection process should be considered in this proceeding through the process and schedule already established by the Commission in its April 9, 2020 Order.[4]

Notwithstanding the foregoing positions with respect to the DER Parties' proposals, the Company wants to provide whatever relief it can to help its customers and the solar industry get through this unprecedented challenge. To this end, the Company proposes to implement the following:

- As a part of continuous improvement, the Company will initiate the process to swap out revenue meters as soon as a customer is given conditional approval to build. Currently, the customer's revenue meter is changed out at the end of the interconnection process, once all building permits are closed and validation documents submitted. This can cause a delay in final interconnection. Changing out the revenue meter once the customer is approved to install should allow for quicker approval to energize systems. The Company proposes this option as a permanent change to the interconnection process, and not just a change during the COVID-19 crisis.

[4] See Order No. 37066, *Establishing Procedural Details and Modifying Hawaiian Electric's Customer Grid Supply Plus Program for Hawaii Island,* filed on April 9, 2020, in Docket No. 2019-0323.

As discussed above, the COVID-19 crisis is presenting very difficult and unprecedented challenges for customers, the Company, and businesses across the State. As an example of one of the Company's challenges, today, every circuit looks very different than it did before, especially those circuits that had large commercial loads that are no longer operating. The island of Maui is experiencing record low loads (e.g., 42.5 MW on Saturday, April 11, 2020). The Big Island routinely has daytime load minimums that are lower than nighttime minimums. It is challenging to plan and predict how loads will change during this crisis and as the State starts to stabilize after COVID. In these uncharted waters, the Company needs to account for the changes the Company is seeing on the grid to ensure adding systems does not create a problem if load levels the Company is seeing now, which were not expected, were to recur in the future.

The primary focus of the Company, as outlined by the Commission, is to ensure reliable and affordable essential services. This requires prioritization of constrained resources and the interests and needs of all customers. Notwithstanding these challenges, and as discussed above, the Company is proposing to do what it can for customers and the solar industry by expediting the interconnection process by swapping out revenue meters upon conditional approval of a PV system. This sensible and effective proposal will better serve customers and support the solar industry during these challenging times and even after the State recovers from the current COVID-19 pandemic.

In parallel, at a higher level, the Company is evaluating and developing options to help customers and the State recover from this crisis. The Company appreciates the Commission's April 9, 2020 Order Commencing Phase 2 of the Community-Based Renewable Energy (CBRE) Program, and can foresee significant potential to support customers with low to moderate incomes via the next phase of the CBRE Program. In addition, Hawaiian Electric has already met with organizations like Hawaii Energy and the State LIHEAP Office to explore collaboration opportunities to help customers struggling through the COVID-19 crisis. In the DER proceeding, the Company plans to focus on transitioning current interim programs to new programs that are more sustainable and fair for all customers, especially underserved areas. The Company looks forward to further addressing interconnection process improvements as part of this docket, which has an aggressive procedural schedule. In sum, this is the start of the Company's efforts to meet the Commission's call for new proposals to help the State recover from COVID-19; the Company will bring new proposals to the Commission as they are developed.

Hawaiian Electric appreciates the Commission's leadership during these times and looks forward to discussing these and other proposals with the Commission and Parties at the status conference scheduled on April 28, 2020.

Sincerely,

/s/ Kaiulani Shinsato

Kaiulani Shinsato
Director
Customer Energy Resources, Programs

Attachment

c: Division of Consumer Advocacy
Distributed Energy Resources Council
Hawai'i PV Coalition
Hawai'i Solar Energy Association

O‘ahu Residential Customer

New Service or Upgrade Request

For questions, please contact:
543-7070

This applies to all Residential requests, 200 amps and under.

Hawaiian Electric

Residential Electrical Service Request for New Service or Service Upgrade – Work Flow and Approximate Timelines (for O'ahu customers)

	Tasks	Responsible Party	Required Action	Approximate Timeline (Working Days (**))	Additional Information
1	Initiate Electrical Service Request	Customer	1. Review link for requirements: https://www.hawaiianelectric.com/documents/electrical_services/manuals_and_engineering_specifications/heco_esim_9th_edition.pdf. 2. Contractor calls (808) 543-7070 with all required information. 3. Contractor submits plot plan sketch and photographs.	1-2 days	Contractor must obtain City & County (C&C) Department of Planning and Permitting (DPP) permit number with E2 (Phase-2) meter designation. If there is no permit number when calling (808) 543-7070, a deposit is required. Hawaiian Electric will not issue a work package without permit.
2	Site Visit/Field Check	Hawaiian Electric	Planner to confirm site condition, meter location and service route.	5-10 days	Customer must provide safe access for Hawaiian Electric.
3	Engineering and Design Work	Hawaiian Electric	Planner conducts research and engineering work and makes request to Land & Rights of Way and Survey if easement is required (*).	7-15 days	
4	Cost Proposal Letter Agreement or No Cost Email Notification (*)	Hawaiian Electric	Planner issues cost proposal or no cost email to Contractor.	5-10 days	Contractor work shall adhere to approved design sketch and standards. Failure may cause delays and added cost. Hawaiian Electric's review and inspection is required prior to installation of cables and metering equipment to avoid rework at Customer's/Contractor's cost.
5	Accepting Cost Proposal Letter Agreement and Submit Payment (*)	Customer	Customer returns a signed cost proposal with payment.	Customer Dependent	
6	Construction	Customer	Underground (UG) Service (*) – Contractor to contact Hawaiian Electric's Underground Inspector **prior to** performing trenching work. Overhead Service (*) – Contractor submits photos of installed mast and height measurement to Planner.	Project Dependent	Hawaii law (Section 269E-7) requires calling Hawaii One Call Center, 811 or (866) 423-7287, five (5) to maximum twenty-eight (28) calendar days prior to excavation, or submitting an online service request at: www.digsafelyhawaii.com.
7	Easement (*)	Hawaiian Electric & Customer	Hawaiian Electric to complete survey for easement map and Grant of Easement, if applicable.	90-120 days	NOTE: EASEMENT DOCUMENT (SURVEY) IS A CRITICAL PATH FOR YOUR PROJECT. Hawaiian Electric conducts survey prior to Contractor backfilling the trench.
8	C&C DPP Inspection Release	Customer & DPP	Contractor schedules C&C inspection and obtains inspection release for metering equipment.	Project Dependent	C&C inspector must issue inspection release to Hawaiian Electric.
9	Verification & Issue Work Package & Schedule the Electrical Installation	Hawaiian Electric & Customer	Planner confirms metering equipment installation matches approved sketch via site visit or pictures from Contractor and issues work package. Hawaiian Electric contacts the contractor to confirm schedule.	10-30 Days	If easement is required, Hawaiian Electric requires full execution prior to scheduling installation.
10	Installation & Energization	Hawaiian Electric & Customer	Crew to install electrical equipment and provide power to meter. Contractor to close (energize) Customer's main circuit breaker.	1 Day	Billing cycle starts. Note: The Customer's electricity account is set up several weeks after this task.

** If applicable*

*** These are typical working timeframes. Actual timeframes may be adjusted due to workload and resources. Hawaiian Electric strongly encourages you, the Customer, and Contractor to start the electrical service request early and plan accordingly to avoid delays for your project. Additionally, the proposed installation schedule may change due to system emergencies, weather conditions and situations beyond Hawaiian Electric's control.*

The foregoing document was electronically filed with the State of Hawaii Public Utilities Commission's Document Management System (DMS).